

Pipeline and Hazardous Materials Safety Administration

NOTICE OF AMENDMENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

April 19, 2012

Mr. Mike Moore Vice President Pipelines and Trucking Operations Genesis Pipeline USA, L.P. 919 Milam, Suite 2100 Houston, Texas 77002-5417

CPF 2-2012-5002M

Dear Mr. Moore:

From November 2, 2011 to February 16, 2012, a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) inspected the Genesis Pipeline USA, L.P. (Genesis) operations and maintenance procedures in Alabama pursuant to Chapter 601 of 49 United States Code. The written procedures are contained in the *Genesis Energy Liquid & CO2 Operations, Maintenance and Emergency Procedures Manual* referred to herein as the LOM&E.

On the basis of the inspection, PHMSA has identified apparent inadequacies within Genesis' LOM&E, as described below:

- 1. §195.52 Immediate notice of certain accidents....
 - ... (b) Information required. Each notice required by paragraph (a) of this section must be made to the National Response Center either by telephone to 800–424–8802 (in Washington, DC, 202–267–2675) or electronically at http://www.nrc.uscg.mil and must include the following information:
 - ...(1) Name, address and identification number of the operator.

Genesis' LOM&E written procedures for the immediate notice of certain accidents did not ensure that all required information be reported. The procedure in LOM&E Section 4.6, Accident (and other) Reporting, did not require that the PHMSA assigned operator identification number (OPID) to be included in reports to the National Response Center.

2. §195.55 Reporting safety-related conditions.

(a) Except as provided in paragraph (b) of this section, each operator shall report in accordance with §195.56 the existence of any of the following safety-related conditions involving pipelines in service:

... (2) Unintended movement or abnormal loading of a pipeline by environmental causes, such as an earthquake, landslide, or flood, that impairs its serviceability.

Genesis' LOM&E written procedures for reporting safety-related conditions incorrectly listed the requirements for reporting the unintended movement or abnormal loading of a pipeline by environmental causes.

The procedure in LOM&E Section 3.1, Reporting Safety-Related Conditions, incorrectly stated the following (bold emphasis added): "The following conditions are safety-related conditions: - Movement or abnormal loading of a pipeline by environmental causes (such as earthquake, landslide or flood) that could affect its operation." The regulatory reporting requirement is for "unintended movement" (not "movement") that "impairs serviceability" (not which "could affect its operation").

3. §195.55 Reporting safety-related conditions.

(a) Except as provided in paragraph (b) of this section, each operator shall report in accordance with §195.56 the existence of any of the following safety-related conditions involving pipelines in service:

... (6) Any safety-related condition that could lead to an imminent hazard and causes (either directly or indirectly by remedial action of the operator), for purposes other than abandonment, a 20 percent or more reduction in operating pressure or shutdown of operation of a pipeline.

Genesis' LOM&E written procedures for reporting safety-related conditions did not correctly require the reporting of any safety-related condition that could lead to an imminent hazard and causes (either directly or indirectly by remedial action of the operator), for purposes other than abandonment, a 20 percent or more reduction in operating pressure or shutdown of operation of a pipeline.

The procedure in LOM&E Section 3.1, Reporting Safety-Related Conditions, incorrectly stated the following (bold emphasis added): "Any safety-related condition which results in a reduction of maximum operating pressure (MOP) by 20% or more or shutdown of a pipeline." The regulatory requirement is for a reduction in "operating pressure" not for a reduction in "maximum operating pressure."

4. §195.55 Reporting safety-related conditions.

...(b) A report is not required for any safety-related condition that—

... (3) Is corrected by repair or replacement in accordance with applicable safety standards before the deadline for filing the safety-related condition report, except that reports are required for all conditions under paragraph (a)(1) of this section other than localized corrosion pitting on an effectively coated and cathodically protected pipeline.

Genesis' LOM&E written procedures for reporting safety-related conditions did not properly state the reporting exception in §195.55(b)(3).

The procedure in LOM&E Section 3.1, Reporting Safety-Related Conditions, incorrectly stated the following (bold emphasis added: "A safety-related condition is only reportable if: - It is not corrected by repair or replacement before the deadline for filing the Safety-Related Condition Report (see "Deadline for Reporting Heading" below). However, general corrosion requiring repair is always reportable. Localized corrosion pitting requiring repair is reportable if it exists on an ineffectively coated line." The regulatory requirement is to report "all conditions under paragraph (a)(1) of this section other than localized corrosion pitting on an effectively coated and cathodically protected pipeline."

- 5. §195.56 Filing safety-related condition reports.
 - ... (b) The report must be headed "Safety-Related Condition Report" and provide the following information:
 - ...(2) Date of report.

Genesis' LOM&E written procedures for reporting safety-related conditions did not ensure the reporting of all the required information. The procedure in LOM&E Section 3.1 Reporting Safety-Related Conditions did not require the date of report to be provided in the report.

- 6. §195.302 General requirements.
 - (a) Except as otherwise provided in this section and in §195.305(b), no operator may operate a pipeline unless it has been pressure tested under this subpart without leakage. In addition, no operator may return to service a segment of pipeline that has been replaced, relocated, or otherwise changed until it has been pressure tested under this subpart without leakage.

Genesis' LOM&E pressure test written procedures were incomplete.

The procedure in LOM&E Section 2.17 Pipeline Integrity Testing conveyed that examples could be found at the end of the section and that the examples would aid individuals in determining whether or not a pressure test volume change could be attributed to a temperature change and, therefore, when to suspect a leak. But, the procedure did not include the referenced examples.

- 7. §195.402 Procedural manual for operations, maintenance, and emergencies.
 - ... (c) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following to provide safety during maintenance and normal operations:
 - ... (4) Determining which pipeline facilities are located in areas that would require an immediate response by the operator to prevent hazards to the public if the facilities failed or malfunctioned.

Genesis' LOM&E procedures did not list which pipeline facilities are located in areas that would require an immediate response by the operator to prevent hazards to the public if the facilities failed or malfunctioned.

The procedure in LOM&E Section 2.3 Immediate Response P/L Identification referenced Genesis's Integrity Management Plan in describing immediate response pipelines. However, specific immediate response pipeline line segments were not identified in the Integrity Management Plan, or in the LOM&E.

- 8. §195.410 Line markers.
 - ... (b) Line markers are not required for buried pipelines located—
 - ...(2) In heavily developed urban areas such as downtown business centers where—
 - (i) The placement of markers is impractical and would not serve the purpose for which markers are intended; and
 - (ii) The local government maintains current substructure records.

Genesis' LOM&E procedures did not properly explain where line markers were not required for buried pipelines in accordance with the regulations.

The procedure in LOM&E Section 2.5 Line Markers and Signs included the following:

"Exceptions

Line markers are not required in the following circumstances:

- When located in heavily developed areas such as downtown business centers.
- When placement creates a safety hazard
- When ineffective or difficult to maintain
- When located offshore"

Additionally, LOM&E Section 2.5 stated that markers were not required for the circumstance of "...when ineffective or difficult to maintain." These circumstances did not describe the circumstances required of §195.410(b)(2).

9. §195.432 Inspection of in-service breakout tanks.

... (b) Each operator must inspect the physical integrity of in-service atmospheric and low-pressure steel aboveground breakout tanks according to API Standard 653 (incorporated by reference, see §195.3). However, if structural conditions prevent access to the tank bottom, the bottom integrity may be assessed according to a plan included in the operations and maintenance manual under §195.402(c)(3).

Genesis' LOM&E procedures did not require certain physical integrity inspections of atmospheric steel aboveground breakout tanks according to API Standard 653 (API 653) to be conducted by, or be under the responsibility of, an *authorized inspector*. Also, the procedures did not require certain documentation of monthly tank inspections.

- LOM&E Section 2.11 Breakout Tank Inspection did not require visual external inspections to be conducted by an authorized inspector. API 653 Section 6.3.2.1 required external inspections to be conducted by an authorized inspector "... at least every five years or at the quarter corrosion rate life (RCA/4N) of the shell, whichever is less." An authorized inspector is defined in API 653 Section 3.6 as "An employee of an authorized inspection agency and is certified as an Aboveground Storage Tank Inspector per Appendix D of this standard."
- LOM&E Section 2.11 Breakout Tank Inspection did not require that an authorized inspector be used for determining the controlling thicknesses in each shell course when there are corroded areas of considerable size, as required by API 653 Section 4.3.2.1.
- LOM&E Section 2.11 Breakout Tank Inspection did not convey that formal internal inspections of steel atmospheric breakout tanks are required to be under the responsibility of an authorized inspector as required by API 653 Section 6.4.1.2.

- LOM&E Section 2.11 Breakout Tank Inspection did not convey that the actual internal inspection interval shall be set to ensure that the bottom plate minimum thicknesses at the next inspection are not less than the values listed in Table 6-1 of API 653.
- Genesis' *Monthly Tank Inspection Report* form (effective 09/17/2007) did not list required inspections for the chime, tank shell distortion, dike, signs of settlement, and condition of the foundation. These inspection items are required by LOM&E Section 2.11 Breakout Tank Inspection.
- 10. §195.559 What coating material may I use for external corrosion control? Coating material for external corrosion control under §195.557 must—
 - (a) Be designed to mitigate corrosion of the buried or submerged pipeline;
 - (b) Have sufficient adhesion to the metal surface to prevent under film migration of moisture:
 - (c) Be sufficiently ductile to resist cracking;
 - (d) Have enough strength to resist damage due to handling and soil stress;
 - (e) Support any supplemental cathodic protection; and
 - (f) If the coating is an insulating type, have low moisture absorption and provide high electrical resistance.

Genesis' LOM&E procedures did not include sufficient detail to provide adequate guidance in the selection of acceptable coatings for specific applications.

LOM&E Section 2.1 Design & Construction and LOM&E Section 2.19 External Corrosion did not include sufficient detail to provide adequate guidance in the selection of acceptable coatings for the application of coatings at weld joints, for coating repair, for air-to-soil interfaces, and for new pipe. Moreover, the procedures did not adequately describe surface preparation for coatings, compatibility with existing coatings or the limitations of application and use of coatings. This was evidenced by the inappropriate use of hot melt repair sticks that were used to repair non-pinhole sized fusion bond epoxy (FBE) coating holidays at MP 24.239 on the Frisco City to I-65 Jct. line on July 18, 2011.

11. §195.561 When must I inspect pipe coating used for external corrosion control? ...(b) You must repair any coating damage discovered

Genesis' LOM&E procedures for pipe coating did not include the requirement to repair coating damage discovered when inspecting pipe coatings used for external corrosion control.

- 12. §195.573 What must I do to monitor external corrosion control?
 - (a) Protected pipelines. You must do the following to determine whether cathodic protection required by this subpart complies with §195.571:
 - ... (2) Identify not more than 2 years after cathodic protection is installed, the circumstances in which a close-interval survey or comparable technology is practicable and necessary to accomplish the objectives of paragraph 10.1.1.3 of NACE SP 0169 (incorporated by reference, see §195.3).

Genesis' LOM&E procedures for external corrosion control monitoring did not identify when a close-interval survey or comparable technology is practicable and necessary to accomplish the objectives of paragraph 10.1.1.3 of NACE SP 0169.

LOM&E Section 2.19 External Corrosion stated, "Identify not more than 2 years after cathodic protection is installed, the circumstances in which a close interval survey or comparable technology is practical and necessary to accomplish the objectives of paragraph 10.1.1.3 of NACE SP 0169 – 2007." This procedure parroted the regulation and did not convey any guidance or factors to consider in determining when a close interval survey or comparable technology is practical and necessary.

- 13. §195.575 Which facilities must I electrically isolate and what inspections, tests, and safeguards are required?
 - ... (c) You must inspect and electrically test each electrical isolation to assure the isolation is adequate.

Genesis' LOM&E procedures for electrical isolation inspection and test procedures did not establish how Genesis inspected and tested an electrical isolation to determine if it was adequate.

LOM&E Section 2.19 External Corrosion did not describe the process required to be used to determine whether or not a casing is isolated or shorted from the carrier pipe. The procedure mimicked the code.

- 14. §195.579 What must I do to mitigate internal corrosion?
 - (a) General. If you transport any hazardous liquid or carbon dioxide that would corrode the pipeline, you must investigate the corrosive effect of the hazardous liquid or carbon dioxide on the pipeline and take adequate steps to mitigate internal corrosion.

Genesis' LOM&E procedures for internal corrosion mitigation procedures did not establish adequate guidance for how Genesis investigates the corrosive effects of the hazardous liquid it transports and how it would take mitigative actions.

LOM&E Section 2.20 Internal Corrosion Control did not adequately describe the investigation of the corrosive effect of the liquid transported, or the steps Genesis has taken, or will take, to mitigate internal corrosion. The internal corrosion monitoring and mitigation procedures were written in general terms and did not include, nor reference, the maintenance pigging, inhibitor injection, coupon sampling, and program attribute target ranges (inhibitor residuals, coupon loss rates, pigging frequencies, etc.) that Genesis uses.

- 15. §195.581 Which pipelines must I protect against atmospheric corrosion and what coating material may I use?
 - ... (c) Except portions of pipelines in offshore splash zones or soil-to-air interfaces, you need not protect against atmospheric corrosion any pipeline for which you demonstrate by test, investigation, or experience appropriate to the environment of the pipeline that corrosion will—
 - ... (2) Not affect the safe operation of the pipeline before the next scheduled inspection.

Genesis' LOM&E procedures for the protection of the pipeline against atmospheric corrosion and its *Atmospheric Corrosion Inspection* form had conflicting guidance.

The requirements and guidance in LOM&E Section 2.19 External Corrosion Control and the Atmospheric Corrosion Inspection form were not consistent as follows:

- The LOM&E Section 2.19 External Corrosion Control on page 7 of 10 stated, "Except for pipelines in offshore splash zones, or soil-to-air interfaces, we need not protect facilities that we demonstrate by test, investigation or experience that corrosion will only be a light surface oxide or will not affect safe operation of the pipeline before the next scheduled inspection;"
- The LOM&E Section 2.19 External Corrosion Control on page 8 of 10 stated, "All components and piping in a pipeline system that are exposed to the atmosphere must be painted or coated to prevent atmospheric corrosion. The painting or coating must be maintained to ensure effectiveness. "If atmospheric corrosion is found during inspection, you must provide protection against corrosion as required by 195.58: Must clean and coat each portion of the pipeline that is exposed to the atmosphere."
- The Atmospheric Corrosion Inspection form conveyed, in part, "The general repair criterion is any damage that, in your opinion, may cause a release before the next inspection. Please inform maintenance of any coating damage that needs repair."

16. §195.589 What corrosion control information do I have to maintain?

... (c) You must maintain a record of each analysis, check, demonstration, examination, inspection, investigation, review, survey, and test required by this subpart in sufficient detail to demonstrate the adequacy of corrosion control measures or that corrosion requiring control measures does not exist. You must retain these records for at least 5 years, except that records related to §§195.569, 195.573(a) and (b), and 195.579(b)(3) and (c) must be retained for as long as the pipeline remains in service.

Genesis' LOM&E procedures for corrosion control records allowed Genesis to retain certain corrosion control records for maximum times that were less than the required 5-year record retention requirement in the regulations.

LOM&E Section 2.2 Pipeline Maps, Records, Operating History, Documentation Table listed "Document Retention Times" ranging from 2 to 3 years; i.e. less than 5 years.

17. §195.428 Overpressure safety devices and overfill protection systems. (a) Except as provided in paragraph (b) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, or in the case of pipelines used to carry highly volatile liquids, at intervals not to exceed 71/2months, but at least twice each calendar year, inspect and test each pressure limiting device, relief valve, pressure regulator, or other item of pressure control equipment to determine that it is functioning properly, is in good mechanical condition, and is adequate from the standpoint of capacity and reliability of operation for the service in which it is used.

Genesis' LOM&E procedures for overfill system inspection, testing, and maintenance did not include, or reference, the written procedures that were being used.

LOM&E Section 2.10 Overpressure Protection Devices conveyed, "Overfill protection equipment shall be inspected, tested, and maintained at the same intervals, and in the same exact manner, as overpressure protection devices." However, the detailed procedures that were actually used by Genesis personnel were found in the Operator Qualification trainee modules, and were not included or referenced in the LOM&E.

Response to this Notice

This Notice is provided pursuant to 49 U.S.C. § 60108(a) and 49 C.F.R. § 190.237. Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b). If you do not respond within 30 days of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

If, after opportunity for a hearing, your plans or procedures are found inadequate as alleged in this Notice, you may be ordered to amend your plans or procedures to correct the inadequacies (49 C.F.R. § 190.237). If you are not contesting this Notice, we propose that you submit your amended procedures to my office within 30 days of receipt of this Notice. This period may be extended by written request for good cause. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed.

It is requested (not mandated) that Genesis Pipeline USA, L.P. maintain documentation of the safety improvement costs associated with fulfilling this Notice of Amendment (preparation/revision of plans, procedures) and submit the total to Wayne T. Lemoi, Director, Southern Region, Pipeline and Hazardous Materials Safety Administration. In correspondence concerning this matter, please refer to **CPF 2-2012-5002M** and, for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,

Wayne T. Lemoi

Director, Office of Pipeline Safety

PHMSA Southern Region

Enclosure: Response Options for Pipeline Operators in Compliance Proceedings